

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A communication circuit, comprising:  
a first transceiver circuit;  
a second transceiver circuit; and  
an integrated transformer having a single core, an input coil, a first output coil, and a second output coil,  
wherein the input coil is configured to be coupled to a signal source, the first output coil is coupled to the first transceiver circuit, and the second output coil is coupled to the second transceiver circuit.
2. (Original) The communication circuit of claim 1, wherein the first transceiver circuit includes an ADSL codec.
3. (Original) The communication circuit of claim 2, wherein the second transceiver circuit includes a LAN codec.
4. (Original) The communication circuit of claim 3, wherein the second transceiver circuit includes a home LAN codec.
5. (Original) The communication circuit of claim 1, wherein the single core is configured to operate in a plurality of frequency ranges.
6. (Original) The communication circuit of claim 5, wherein the first frequency range includes frequencies between 20 kHz and 1.1 MHz and the second frequency range includes frequencies between 4.5 MHz and 10 MHz.
7. (Original) The communication circuit of claim 1, further comprising a bandpass filter coupled between the second output coil and the second transceiver circuit.
8. (Original) The communication circuit of claim 7, wherein the bandpass filter is configured to pass only frequencies between 4.5 MHz and 10 MHz.

9. (Original) The communication circuit of claim 7, further comprising a substrate having the transformer and the bandpass filter disposed thereon.

10. (Currently amended) A transformer for use in an integrated ADSL/LAN system, comprising:

a an integrated core;

a an integrated first circuit coupled to the core and coupleable to a signal source configured to receive an input signal from the signal source, wherein the input signal includes at least one of an ADSL signal and a LAN signal;

a an integrated second circuit coupled to the core configured to receive the ADSL signal; and

a an integrated third circuit coupled to the core configured to receive the LAN signal.

11. (Original) The transformer of claim 10, wherein the core is configured to operate in a plurality of frequency ranges, wherein a first frequency range includes an ADSL frequency and a second frequency range includes a LAN frequency.

12. (Original) The transformer of claim 11, wherein the first frequency range includes frequencies between 20 kHz and 1.1 MHz and the second frequency range includes frequencies between 4.5 MHz and 10 MHz.

13. (Original) The transformer of claim 10, wherein the second circuit is configured to provide the ADSL signal to an ADSL codec.

14. (Original) The transformer of claim 13, wherein the third circuit is configured to provide the LAN signal to a LAN codec.

15. (Original) The transformer of claim 14, further comprising a bandpass filter coupled between the third circuit and the LAN codec configured to pass only frequencies between 4.5 MHz and 10 MHz.

16. (Original) The transformer of claim 10, wherein the first circuit, second circuit, and third circuit each include a coil of wire surrounding the core.

17. (Currently amended) A transformer circuit, comprising:  
means for providing a path for a magnetic field;

means for receiving an input signal from a signal source, wherein the input signal includes at least one of an ADSL signal and a LAN signal;

means for receiving the ADSL signal via the magnetic field path; and

means for receiving the LAN signal via the magnetic field path,

wherein the transformer circuit is integrally formed as part of an integrated ADSL/LAN system.

18. (Original) The transformer of claim 17, wherein the means for providing a path includes a transformer core.

19. (Original) The transformer of claim 17, wherein the means for receiving an input signal includes an RJ11 jack.

20. (Original) The transformer of claim 17, wherein the means for providing a path includes means for operating in a plurality of frequency ranges, wherein a first frequency range includes an ADSL frequency and a second frequency range includes a LAN frequency.

21. (Original) The transformer of claim 20, wherein the first frequency range includes frequencies between 20 kHz and 1.1 MHz and the second frequency range includes frequencies between 4.5 MHz and 10 MHz.

22. (Original) The transformer of claim 17, wherein the means for receiving an input signal, the means for receiving the ADSL signal, and the means for receiving a LAN signal each includes a coil of wire having plurality of turns.

23. (Currently amended) A communication circuit for home use, comprising:

an ADSL transceiver circuit;

a LAN transceiver circuit; and

a an integrated transformer configured to receive an ADSL signal from a signal source and to provide the ADSL signal to the ADSL codec and to receive a LAN signal from the signal source and to provide the LAN signal to the LAN codec,  
wherein the communication circuit is integrated into a computing device.

24. (Original) The communication circuit of claim 23, wherein the transformer includes a first coil coupleable to the signal source, a second coil

coupled to the ADSL receiver circuit, and a third coil coupled to the LAN receiver circuit.

25. (Original) The communication circuit of claim 23, wherein the LAN receiver circuit is a Home LAN receiver circuit.

26. (Original) The communication circuit of claim 23, further comprising a bandpass filter coupled between the transformer and the LAN receiver circuit configured to pass only frequencies between 4.5 MHz and 10 MHz.

27. (Original) The communication circuit of claim 26, further comprising a substrate having the transformer and the bandpass filter disposed thereon.

28. (Original) The communication circuit of claim 23, wherein the ADSL receiver circuit includes an ADSL codec.

29. (Original) The communication circuit of claim 23, wherein the transformer includes a core configured to operate in a plurality of frequency ranges, wherein a first frequency range includes an ADSL frequency and a second frequency range includes a LAN frequency.